

HyppTV Installation and Troubleshooting Guide for Installer – Streamyx Version



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TVOS R2 (July 2013)



Learning Objectives

- □ To understand basic concept of HyppTV technology & product
- □ To perform installation of HyppTV in full compliance to the steps and process
- □ To identify symptom and troubleshoot the HyppTV problem
- Be a HyppTV advocate

Pre-requisites:

- DEL installation & troubleshooting
- Streamyx installation & troubleshooting
- ☐ SAMS, ICare Prime



What is HyppTV?

- HyppTV is a television service for UniFi and Streamyx (4Mb and 8Mb only) subscribers
- □ HyppTV provides TV channels, on-demand video programming and interactive pages delivered by TM broadband using IPTV technology.
- □ Differences between HyppTV UniFi and Streamyx:

Features	UniFi	Streamyx 4/8 Mbps
Network Quality	Guaranteed bandwidth	Best Effort
Channel Resolution	SD + HD Channels	Currently SD Channels
Video Quality	2Mbps for SD, 8Mbps for HD	Up to 1Mbps for SD
Wireless STB	Currently No	Yes
Browser	Currently only limited	Yes

☐ This document focus on HyppTV for Streamyx 4/8 Mbps only



HyppTV Basic Terminology

IPTV	
	Technology of delivering digital video over broadband using IP protoco
Set	-Top Box (or STB)
	Audio /Video Decoder for HyppTV Service
Live	e TV
	Free and paid broadcast TV channels
VOD(Video On Demand)	
	Browse a catalog of video and watch it anytime
Interactive Services	
	Web based service such as Facebook or Youtube
TS	TV (Time Shift TV)
	TV service that can be pause or rewind TV program



HyppTV Basic Terminology

using IPTV technology

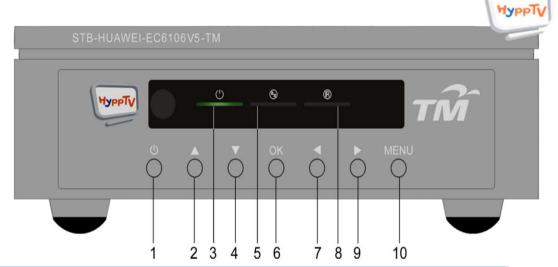
Catch Up TV TV service that can view previous day TV program Installation Password Password for 1st time installation and used also to reset Purchase PIN and Parental PIN, randomly generated by ICP (12 digit alphanumeric) Purchase PIN Password to purchase content, 6 digit number, default is 123456 Parental PIN Password to lock channels, 6 digit number, default is 123456 Multi Screen Devices Smart phones, tablets, game console, PC and STB that can stream TV



STB Basic Features

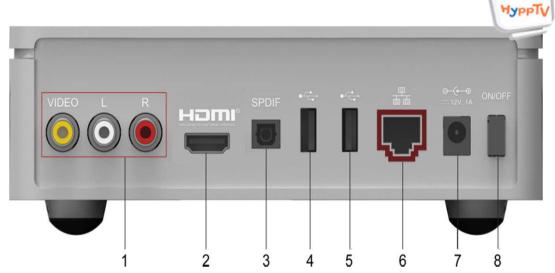
- □ Android Gingerbread OS
- ☐ Play Live TV and VOD on STB and IOS/Android device
- □ Built-in Internet browser
- ☐ Home Media Player –play from USB external storage
 - Support MP4, flv, avi,3gp, mpg and rmvb video formats
 - ☐ Support JPEG, bmp, png picture formats
 - ☐ Support mp3, AAC audio formats
 - Support DLNA can play media from DLNA-supported device to STB
- Wireless B/G/N support
- Network diagnostic tool

STB Appearance -Front Panel



No	Description
1	Press it to switch STB between working state and standby state.
2/4	Change to next/previous channel, or move cursor upwards/downwards in EPG
3	Power indicator, if GREEN, STB is in active mode, if RED STB is in standby mode
5	Network Link Indicator, if GREEN, STB is connected to network, if RED STB is not connected to network
6	Confirms an operation
7/9	Reduce/Increase sound volume, or move cursor leftwards/rightwards in EPG
8	Infrared indicator. If the indicator blinks, it indicates that the STB is receiving signals from the remote control.
10	Press to display EPG menu

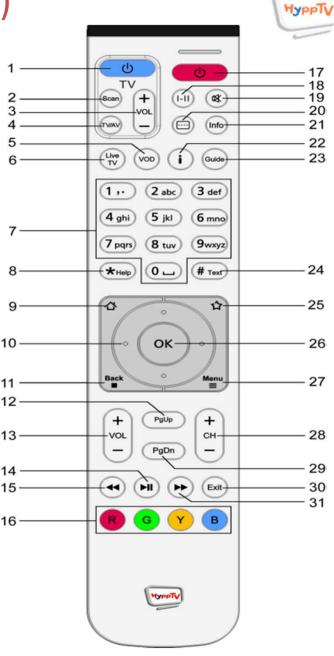
STB Appearance -Rear Panel



No	Description
1	Port for connecting with Composite video input port of TV.
	Port for connecting with left audio channel input port of TV.
	Port for connecting with right audio channel input port of TV.
2	HDMI output port
3	SPDIF output port
4/5	USB 2.0 port
6	RJ 45 port to be connected to Modem
7	AC input port connected to wall socket
8	Power Switch, turn ON/OFF STB

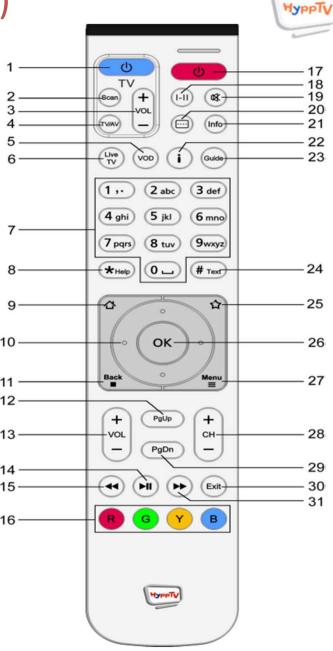
STB Appearance – Remote Control (1)

No	Function
1	Switch the TV to standby or on
2	Scan TV function
3	Adjust TV sound volume
4	Switch TV input source
5	VOD shortcut
6	Live TV shortcut
7	Alphanumeric button selector
8	Help shortcut
9	Homepage shortcut
10	-Move the cursor up, down, left or right in EPG.- Up and down change channels.- Left and right adjust sound volume.
11	-Return to previous menu when browsing EPGReturn to VOD home page when playing VOD.
12	Scroll up in channel list page
13	Adjust sound volume



STB Appearance – Remote Control (2)

No	Function
14	In VOD mode – pause and resume play In Live TV mode - pause and resume play for selected channels only
15	-Rewind a VOD program.-Rewind a TSTV (time shift) program.-Switch a playing TV program to TSTV mode.
16	Reserved
17	Switch the STB to standby or on
18	Switch between different audio track
19	Mute/un-mute audio
20	Enable subtitle
21	Display info of current program
22	Interactive features shortcut
23	Channel list shortcut
24	Enable virtual keyboard
25	View notification



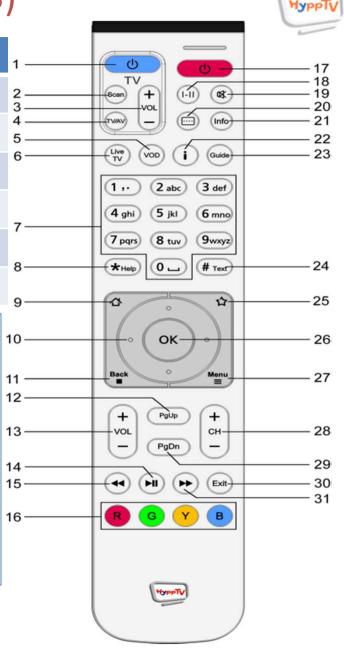
STB Appearance – Remote Control (3)

No	Function
26	Confirm an operation, enable virtual keyboard
27	EPG menu shortcut
28	Change channels
29	Scroll to the next page in Live TV channel list
30	Go to previous channel played
31	Fast forward a VOD /TSTV

Onscreen Keyboard

- -This is used to insert alphabets, characters or numbers into the STB
- -If just number can just use the number keys (No 7)
- -There are two different onscreen keyboard
- 1. To setup SSID password, to show onscreen keyboard press OK, to hide press Back
- 2. To setup HyppTV username & password, to show /hide onscreen keyboard is by pressing #_{Text}

^{*} USB keyboard and mouse can also be used, just plug in to the STB USB ports

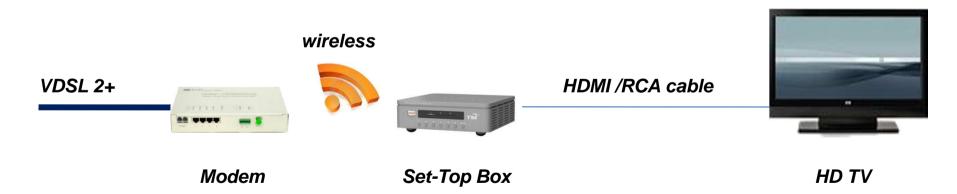




Streamyx 8Mbps Installation Order*

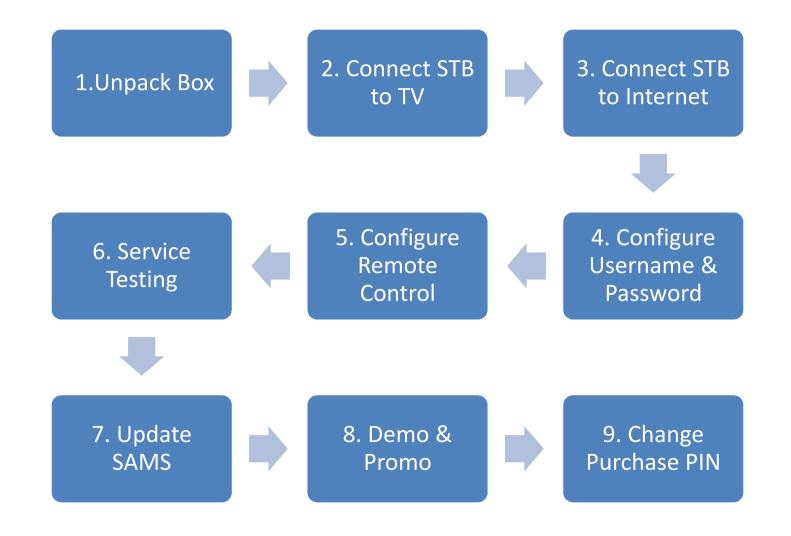
DEL > Streamyx > HyppTV

HyppTV Home Setup Diagram



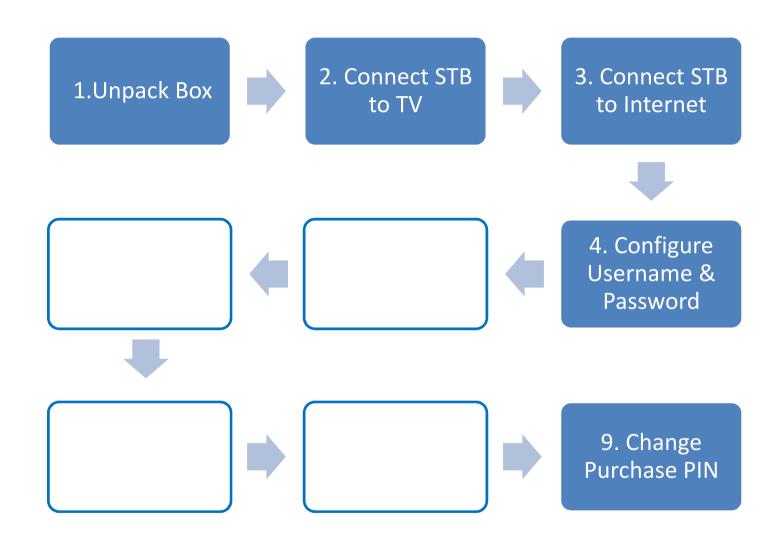
HyppTV Installation Flow for SI





HyppTV Installation Flow Self Install by Customer





Step 1 : Unpack Box

- ☐ Open the box and check the content
- Insert batteries into remote control
- Attach IPTV identifier stickers with HyppTV username, TMCC contact (100) number and installation date on the STB
- Attach QC-Passed stickers on the STB
- Attach 1 x MAC Address and Serial Number Sticker on the STB
- Attach MAC Address and Serial Number Sticker on Service Acceptance Form of Customer Copy and Staff Copy

☐ The items in the box are as below:

□ STB

☐ Remote Control

□ Battery (2)

Power Adapter

□ HDMI Cable

□ RCA Cable

□ RJ45 Cable

☐ Stickers (5)

□ STB Manual

Warranty Card



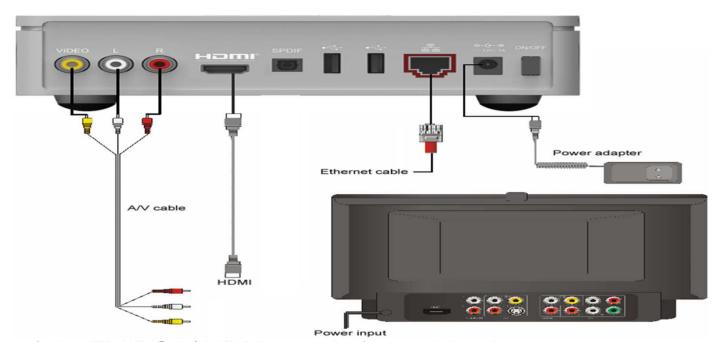
Step 2 : Connect STB to TV



- □ Put the Modem near to main computer
- □ Put the STB near main TV
- ☐ Connect using HDMI cable if customer has LCD/Plasma TV/ LED
- □ Connect using RCA if customer's TV is CRT TV
- ☐ If customer does not have TV, use RCA EasyCAP to connect laptop and STB (See Appendix A)



Step 2 : Connect STB to TV, cont



- ☐ If the TV RCA/ HDMI port is fully utilized get customer permission to "borrow" one of the ports to configure the STB
- Connect the STB power cable to the wall socket and power on the STB by turning "ON/OFF" switch at the back.
- ☐ Turn on the TV and select the right RCA/HDMI TV input on the TV.
- ☐ The HyppTV Homepage will appear



Step 2 : Connect STB to TV, cont

☐ HyppTV Homepage Screenshot



- ☐ HyppTV page is where to view TV and VOD pages
- My Application is where to view and change setting
- My Media is to view file content of the STB



Step 3: Connect STB to Internet

- ☐ The STB can connect to Modem using wireless or wired
- Always use wired but need to configure wireless.
- ☐ If customer used wireless first, need to key in 8288 in the network setting (due to bug for the 1st batch of STB in 2013)
- Ensure the Streamyx Modem is already powered on and connected to Internet

Wired Setup

☐ To configure wired just connect the RJ45 cable from STB port to Streamyx Modem port.

Wireless Setup

 Ensure that the Streamyx SSID has been created during Streamyx installation, if not create a new one



Step 3: Connect STB to Internet, cont



- ☐ From the HyppTV Homepage, go to My Applications
- ☐ Go to Setting and press OK. If prompt for password, insert 8288
- ☐ Go to Wireless and Network and then Enable WLAN and press OK.
- Wait until the message Turning On appears and then disappear
- ☐ Go to Set WLAN and press OK



Step 3: Connect STB to Internet, cont

Set WLAN		
TP-LINK_dzek	Secured with WPA/WPA2 PSK	TA
HUAWEI-ANDROID	Secured with WPA/WPA2 PSK	TA
nature_green	Secured with WPA/WPA2 PSK	76
JNJ02	Secured with WPA/WPA2 PSK	7A
MERCURY_6D2C78	Secured with WPA/WPA2 PSK	īA.
TP-LINK-k	Secured with WPA/WPA2 PSK	īA
wupeng	Secured with WPA/WPA2 PSK	īA
	TP-LINK_dzek HUAWEI-ANDROID nature_green JNJ02 MERCURY_6D2C78 TP-LINK-k	TP-LINK_dzek Secured with WPA/WPA2 PSK HUAWEI-ANDROID Secured with WPA/WPA2 PSK nature_green Secured with WPA/WPA2 PSK JNJ02 Secured with WPA/WPA2 PSK MERCURY_6D2C78 Secured with WPA/WPA2 PSK TP-LINK-k Secured with WPA/WPA2 PSK

☐ Select the Streamyx Modem SSID and press OK.



Step 3: Connect STB to Internet, cont



- Insert password (refer to customer Streamyx Service Acceptance Form for the password) and select Connect
- To insert password, plug in USB keyboard to the STB or alternatively can use the onscreen keyboard
- If the connection successful the message would be "Connected to"
- □ Press Back twice to got to HyppTV Homepage



Step 4: Configure Username & Password - on Login Page(1/2)

- ☐ There are 2 ways to login to Input username & Password.
- ☐ For Customer DIY, Hypptv login page to input username & Password via remote
- ☐ For Installer, IPTV Setting page to input username & password via remote by press # Text button.
- ☐ The HyppTV Login page appear



Insert the username and password as stated in the Confirmation Slip by using onscreen keyboard



Step 4: Configure Username & Password - on Login Page(2/2)

- ☐ If using onscreen keyboard press # Text
- Press OK after completing the input of username and password
- ☐ If either the username and password has error, call HBC



Step 4: Configure Username & Password - on IPTV Setting Page (1/2)

- ☐ From HyppTV Homepage go to Setting
- ☐ Go to IPTV Settings Page.

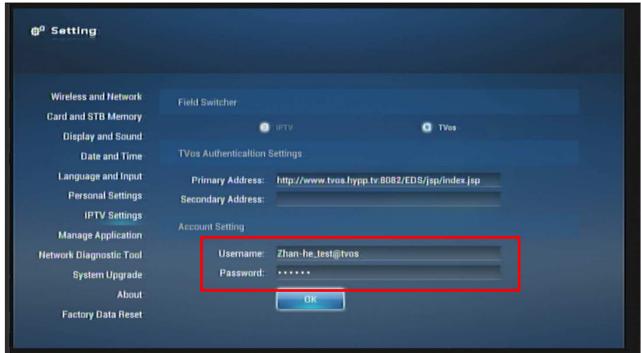


□ The password for IPTV Setting is 3008



Step 4: Configure Username & Password - on IPTV Setting Page (2/2)

- □ At IPTV Setting Page, press down button on remote control and go to the account setting
- □ Plug in the USB Keyboard at the STB USB port.
- ☐ Input the Username & Password by using USB Keyboard.
- □ Press OK Button after complete input the username & password.



Step 5 : Configure Remote Control



The remote control can copy certain button of TV remote control, follow steps below

- Step 1. Put TV remote control and STB remote close together with both front ends touch each other
- Step 2. Press the scan button (button no 2) on the STB remote control. Wait for the red light to turn on.
- Step 3. Once the red light is on, press the button (button no 1) on the STB remote control.
- Step 4. Press the Power button on the TV remote control. The red light will start blinking and then remain on.
- Step 5. Keep both front ends of the remote controls together during this process.
- Step 6. Once the red light is off, the button (button no 1) can now be used to switch on or off the TV set
- Step 7. Repeat steps 1-5 for buttons + vol (button no 3) and TWAV (button no 4)

Step 6 : Service Testing

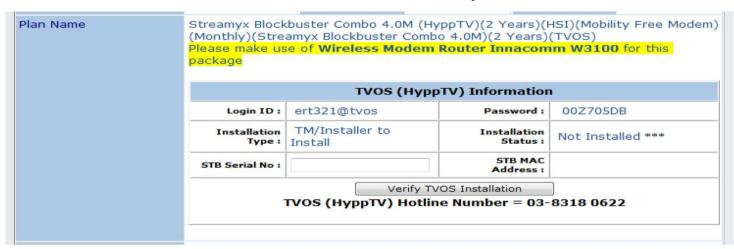


- □ From HyppTV Mainpage go to HyppTV
- □ View any 2 channels and 1 free VOD
- ☐ If there is no video or the video is buffering/jerking please see troubleshooting guide.
- If the problem affects all channel and still fail to be resolved do Return Order.
- The Return Code in SAMS shall be either
 - ☐ HyppTV HyppTV system failure
 - ☐ HyppTV All Channels no signal
 - HyppTV All Channels jerking

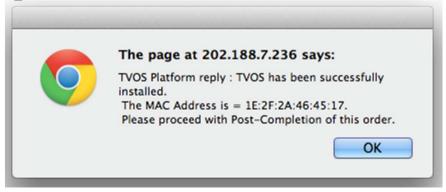


МуррТу

- ☐ Login to SAMS
- Enter STB serial Number and click ,Verify TVOS Installation .



☐ If the username and password of STB is configured properly there will be message as below



☐ If not configured properly SAMS would no allow Post Complete

Step 8: Demo & Promo



- ☐ HyppTV is the TV service for on Unifi and Streamyx
- ☐ Inform customer what are Free Channels, Premium Channels and VOD
- Demo any 1 Channel

Step 9 : Change Purchase PIN



- □ Default PIN is 123456. Advise customer to change the default PIN to avoid unauthorized purchases.
- ☐ From STB Homepage go to HyppTV and press OK.

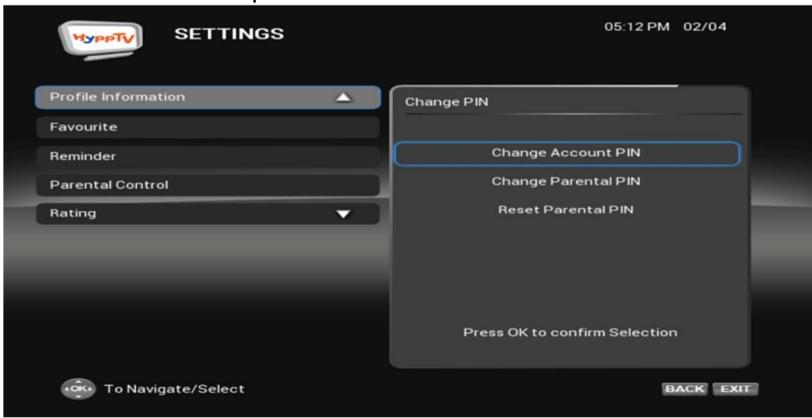


Click Menu on the remote control and the Menu appears at the bottom of the TV screen. Move remote control to the right and select SETTINGS and press OK.



МуррТV

- ☐ Go to Profile Information.
- ☐ Go to Change PIN and press OK.
- Go to Change Account PIN and press OK.
- Insert 123456 to the Old PIN and New PIN and Confirm New PIN and select Confirm and press OK.



How To Troubleshoot IPTV Problems

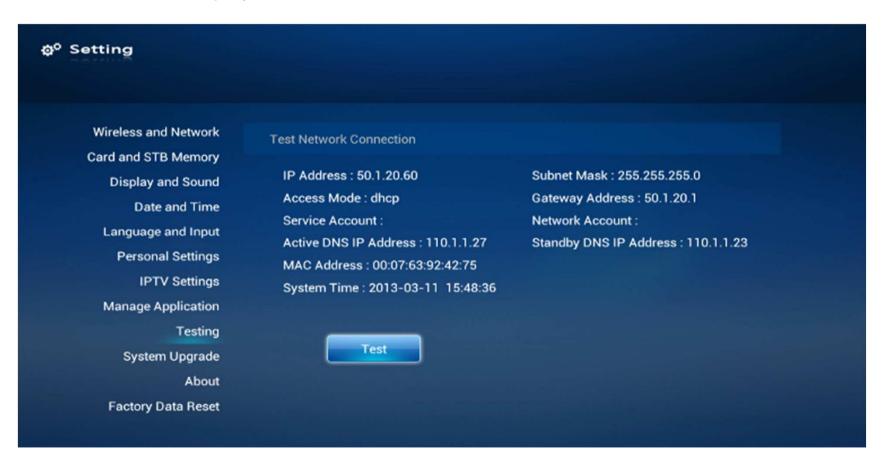
□ There are 2 ways to detect IPTV problem
 □ Symptom
 □ Error codes
 □ From the symptom & error codes specific troubleshooting steps can be used
 □ There are 3 tools to diagnose & troubleshoot IPTV problem
 □ Network diagnostic tool
 □ Test gear to check SNR ratio
 □ Spare STB / Modem

How To Troubleshoot IPTV Problems, cont

These are areas where problem can reside:	
	TV or multi screen device
	STB
	Modem
	LAN connection
	Streamyx connection
	TM Network
	Customer profile
	IPTV Platform
	IPTV Video Headend
Ple	ase see Appendix B for Network Diagram for TVOS service
If require to change STB, call TVNOC to unbind the old STB	
acc	count

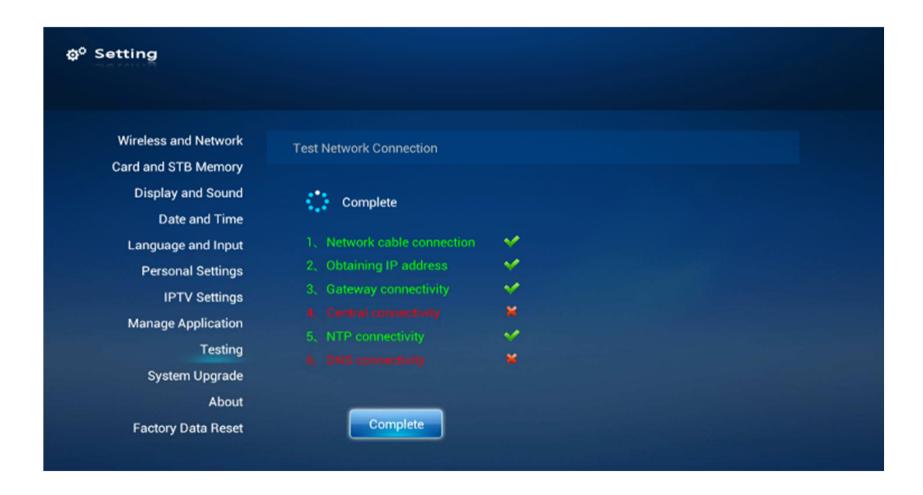
Network Diagnostic Tool

- ☐ This is a tool to detect problem at STB for network related errors.
- ☐ To use, from HyppTV homepage go to "My Application" -> "Settings"-> "Network Diagnostic"-> "Test" and click OK
- ☐ The tool will display network information such as Mac Address and IP Address



Network Diagnostic Tool

- ☐ Go to "Test" and click OK
- ☐ The TV will display STB info and diagnostic result to assist in troubleshooting
- ☐ See next page to see the action step for each test item



Network Diagnostic Tool, cont

Test Item	Action Steps	
If Item 1 is RED: Network Cable Connection	 Check WiFi or RJ45 connection Enable the WiFi or replace / retighten RJ45 Change WiFi to RJ45 or from RJ45 to WiFi If persist send RNO to check the Modem and STB 	
If Item 2 is RED Obtaining IP Address If Item 3 is RED Gateway Connectivity	 Check WiFi or RJ45 connection Reboot Modem and retry Reboot STB and retry Check if there are too many devices connected to WiFi and remove few If persist send RNO to check the Modem and STB Check WiFi or RJ45 connection Check Streamyx Connection From PC try ping 202.188.0.133/202.188.1.5 If persist, reboot Modem and retry If persist send RNO to check the Modem and STB configuration 	
If Item 4 is RED: Central Connectivity If Item 5 is RED: DNS Connectivity If Item 5 is RED: NTP Connectivity	 Reboot STB and retry If persist contact HBC 	



IPTV TROUBLESHOOTING STEPS-SYMPTOM

Symptom	Possible Cause	Action Steps
Login ID Error	Incorrect User ID or Installation Password	 Key in the correct User ID or Installation Password according to Customer Confirmation Slip or RNO Work Order If persist contact HBC to recreate the User ID or reset the Installation Password
No Service -No Live TV and VOD	No Network Connection	 Reboot STB and retry If persist perform Network Diagnostic (see Network Diagnostic page)
No Service -No Live TV	IPTV is connected but Live TV is not available	 Ensure customer already purchase the channel Verify if it is All Channel or single Channel. Reboot STB and retry If persist, contact HBC
No Service -No VOD	IPTV is connected but VOD is not available	 Verify if it is All VOD or single VOD. if All VOD, reboot STB and retry If persist, contact HBC to check the VOD system If Single VOD, take note of the VOD title and send CTT to HBC
Cannot Purchase Channel / VOD	Wrong PIN or platform error	 Ensure the PIN is correct, if forget ask to reset the PIN using the remote.(see Password Info) If persist contact HBC

IPTV TROUBLESHOOTING STEPS-SYMPTOM

Symptom	Possible Cause	Action Steps
No Video	Hardware faulty	 Ensure STB is switched on Retighten the HDMI/RCA cable. If persist, replace the cable If HDMI change to RCA or vice versa Check TV input and try change input, possible the TV port is faulty If persist replace STB
No Audio, Low Audio, Audio Hissing	Hardware faulty	 Ensure the Mute button is not pressed on for both TV and STB Retighten the HDMI/RCA cable. If persist, replace the cable If HDMI change to RCA or vice versa Check TV input and try change input, possible the TV port is faulty If persist replace STB
Video Jerking/Pixelization/Page Loading	Cable, network congestion or customer download large files	 If using WiFi try change to cable If using cable, check the distance between STB and Modem. The recommended length is 10-15 metres If persist check if customer is currently using torrent application or downloading large file. Advise on using torrent will affect the video quality causing jerking If persist, perform speedtest. If the bandwidth is low, check local loop, If persist contact HBC

IPTV TROUBLESHOOTING STEPS-SYMPTOM

Symptom	Possible Cause	Action Steps
Black & White Image	Wrong TV setting	1.Change the TV setting to PAL
No EPG Displayed	Platform problem	Reboot STB and retry If persist contact HBC
HyppTV Function Fails	Platform problem or customer limit reached	 Reboot STB and retry Possible if customer has reach its limit on the number of Favourites, Bookmarks or Reminders. Try delete some and retry. If persist contact HBC
No Subtitle	No subtitle for the content or subtitle button is not pressed	 Try pressing the subtitle button on the remote If there is no subtitle than the channel /VOD does not comes with a subtitle.
STB Not Responding to Remote Control Action	Distance limitation or remote fault	 Keep the distance between STB and remote control below than 5 meters Replace the batteries If persist, replace remote control
STB Could Not Be Powered On	Cable or STB fault	 Advice to check the power cable or the wall socket if it is faulty If persist, replace STB
Cannot DIY Install	Poor understanding or unclear steps	1. See STB Installation Guide Tab

IPTV TROUBLESHOOTING STEPS-ERROR CODES

Error Codes	Possible Cause	Action Steps
103001, 103002	Failed to update the STB due to connectivity error	 Reboot STB and retry If persist perform Network Diagnostic (Refer Network Diagnostic page) If persist, contact HBC
103003	Failed to update the STB due to STB faulty	 Reboot STB and check the service If persist replace STB
107000, 107001, 107002, 107003, 107400, 107403, 107404, 107500, 107503	Connectivity or RRS Server Error	 Reboot STB and try play the VOD again If persist take not of the VOD title and send CTT to HBC
105000, 105303, 105305, 105306, 105309, 105310, 105311, 105312	Connectivity or Verimatrix System Error	Reboot STB and retry If persist contact HBC
108001, 108002, 108004, 108005	Connectivity or EPG Server Error	 Reboot STB and retry If persist perform Network Diagnostic Tool If persist, contact HBC
201008	Incorrect User ID or Installation Password	 Key in the correct User ID or Installation Password according to Confirmation Slip. If persist create SR to reset Password If persist contact HBC to recreate the User ID
201009	User ID not created	1. Contact HBC to recreate the User ID

IPTV TROUBLESHOOTING STEPS-ERROR CODES

Symptom	Possible Cause	Action Steps
201010	User ID is binded to another STB	1.Get the user ID of the account and contact HBC to unbind the account2. After HBC unbind the STB can be used3. Reboot the STB and retry login
201201	MEM Server Error	Reboot STB and retry If persist contact HBC
204016	No product available for ordering.	 The VOD is not available for purchase Advise to press "Back" to exit the page Contact HBC to check the VOD status
204045	No content in the category	 The VOD in the category has been removed Advise to press "Back" to exit the page Contact HBC to check the VOD in the category
205001	Operation failed.	Reboot STB and retry If persist contact HBC
205002	Unable to add due to limit reached	 Delete existing bookmarks, reminders or favourites that customer don't used anymore. Try again, if persist contact HBC
205004	Unable to add.	 Reboot STB and retry If persist contact HBC
205005	Unable to delete.	 Reboot STB and retry If persist contact HBC

IPTV TROUBLESHOOTING STEPS-ERROR CODES

Symptom	Possible Cause	Action Steps
205046	Incorrect Old Purchase PIN	 The Old PIN used to change to new PIN in wrong. Advise to use the correct PIN. If forget, advice to reset PIN using the remote
205111	Invalid Channel Number	 The Channel Number selected does not exist Please select the correct Channel Number
205153	Failed to add Reminder due to program is playing or about to start	 Advise the Reminder cannot be set as the program is starting or about to start Advise to press "Back" on the remote to exit
205201	Content already expired	 Advise that the content that has been purchased has already expired and cannot be viewed anymore No rebate can be entertained because TM has stated that the purchased content is viewable for 48 hours only
206003, 206004, 206006	CA issues on the User ID	Reboot STB and retry If persist contact HBC
301011	Invalid Characters input	Advise to enter the correct characters or alphabets or number
901001, 901002, 901003, 901004	System Error, Busy or Connection Time Out	Reboot STB and retry If persist contact HBC
Other Error Codes		Reboot STB and retry If persist contact HBC

Technical Contact Info

Contact these numbers during installation or troubleshooting

☐ TMCC : 100

□ TVNOC : 1-800-88-2646 option 4

☐ HBC : 1-800-88-2646 option 5

☐ Send emails on new findings, improvements, suggestions, comments to:

□ IPTV Development : nurman.mohamad@tm.com.my

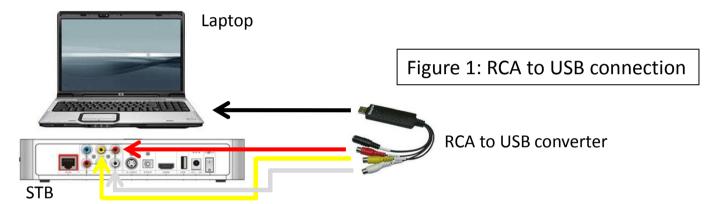
Appendix A: Connect STB to Laptop using RCA EasyCAP

- 1. Install the software first
- 2. Insert CD Driver given
- 3. Install UleadVideoStudio SE DVD by clicking setup icon



USB DVR

- 4. Go to Drivers folder and install USB DVR by clicking the icon
- 5. Connect RCA to USB device to laptop as below, Figure 1:



6. Laptop will detect the device, select No, not this time -> then next, Figure 2:



Figure 2: Windows detect device

Appendix A: Connect STB to Laptop using RCA EasyCAP, cont

7. Select Install the software automatically(Recommended) -> then next, Figure 3:



Figure 3: Install the software automatically

8 Select Continue Anyway, Figure 4 then Finish

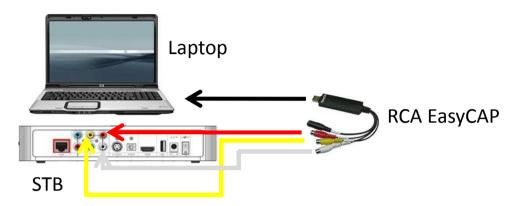


Figure 4: Continue Anyway

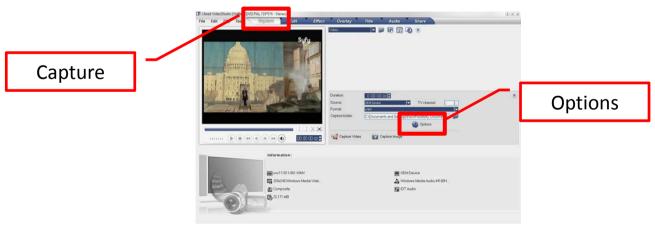
9. RCA to USB converter device is ready to use.

Appendix A: Connect STB to Laptop using RCA EasyCAP, cont

1. Connect RCA EasyCAP to laptop and STB as below.



2. Click Ulead Video Studio SE DVD icon on the desktop, and click Capture >Options > Video and Audio Capture Property Setting



Appendix A: Connect STB to Laptop using RCA EasyCAP, cont

3. Make sure the video configuration as below,



4. Proceed to configure the STB.

Appendix B: HyppTV over Streamyx Network Diagram

